

THE CLAIMS:

The claims, as pending in the subject application, read as follows:

1. to 125. (Canceled)

126. (Previously presented) A hierarchical data display method of displaying hierarchically-managed data items, comprising the steps of:

setting in a background indicating a hierarchical level, a first area in which data item(s) belonging to a parent hierarchical level is displayed and a second area in which data item(s) belonging to a child hierarchical level is displayed, so that the first and second areas are displayed exclusively and without overlapping each other in a display area of every hierarchical level; and

controlling a display of data icons respectively representing the data items in each of the areas.

127. (Previously presented) The method according to Claim 126, wherein sizes of said first and second areas are determined on the basis of the number of data items belonging to the parent level and the number of data items belonging to the child level.

128. (Previously presented) The method according to Claim 126, wherein when there are a plurality of the child levels, a display area for each child level is determined according to the number of data items belonging to levels subordinate to said child level.

129. (Previously presented) The method according to Claim 126, wherein the background is selected and displayed so that a hierarchical depth can be distinguished.

130. (Previously presented) The method according to Claim 129, wherein as said hierarchical depth increases, said background is displayed in a deeper color.

131. (Previously presented) The method according to Claim 126, further comprising a step of zooming in a desired level by performing a given operation, wherein when a zoom up is instructed in the desired level, the display of items are controlled so that only data items belonging to the desired level and levels subordinate to said desired level are displayed.

132. (Previously presented) The method according to Claim 126, further comprising a step of zooming in a desired level by performing a given operation, wherein when a zoom up is instructed in the desired level, the detailed contents of the desired level are displayed.

133. (Previously presented) The method according to Claim 126, further comprising a step of zooming in a desired level by performing a given operation, wherein when a zoom out is instructed in the desired level, the display of items are controlled so that data items belonging to parent level(s) of the desired level are displayed.

134. (Previously presented) The method according to Claim 126, wherein said setting step includes the steps of:

judging whether a remaining area is left in which the first and second areas have not been set; and

setting the first and second areas are set in the remaining area when the remaining area is left.

135. (Previously presented) The method according to Claim 126, wherein a size of each data icon is determined corresponding to the number of the data items.

136. (Previously presented) A hierarchical data display apparatus for displaying hierarchically-managed data items, comprising:

setting means for setting in a background indicating a parent hierarchical level, a first area in which data item(s) belonging to a parent level is displayed, and a second area in which data item(s) belonging to a child hierarchical level is displayed, so that the first and second areas are displayed exclusively and without overlapping each other in a display area of every hierarchical level; and

control means for controlling a display of data icons respectively representing the data items in each of the areas.

137. (Previously presented) The apparatus according to Claim 136, wherein said setting means determines sizes of said first and second areas on the basis of the

number of data items belonging to the parent level and the number of data items belonging to the child level.

138. (Previously presented) The apparatus according to Claim 136, wherein said setting means, when there are a plurality of child levels, determines a display area for each child level according to the number of data items belonging to levels subordinate to said child level.

139. (Previously presented) The apparatus according to Claim 136, wherein said control means selects and displays the background so that a hierarchical depth can be distinguished.

140. (Previously presented) The apparatus according to Claim 139, wherein as said hierarchical depth increases, said background is displayed in a deeper color.

141. (Previously presented) The apparatus according to Claim 136, further comprising zooming means for zooming in a desired level by performing a given operation, wherein said control means, when a zoom up is instructed in the desired level, controls the display of items so that only data items belonging to the desired level and levels subordinate to said desired level are displayed.

142. (Previously presented) The apparatus according to Claim 136, further comprising zooming means for zooming in a desired level by performing a given operation, wherein said control means, when a zoom up is instructed in the desired level, controls to display the detailed contents of the desired level.

143. (Previously presented) The apparatus according to Claim 136, further comprising zooming means for zooming in a desired level by performing a given operation, wherein said control means, when a zoom out is instructed in the desired level, controls the display of items so that only data items belonging to parent level(s) of the desired level are displayed.

144. (Previously presented) The apparatus according to Claim 136, wherein said setting means includes:

judging means for judging whether a remaining area is left in which the first and second areas have not been set; and

means for setting the first and second area in the remaining area when the remaining area is left.

145. (Previously presented) The apparatus according to Claim 136, wherein said control means determines a size of each data icon corresponding to the number of the data items.

146. (Previously presented) A program executable by a computer for displaying hierarchically-managed data items, comprising the steps of:

setting in a background indicating a parent hierarchical level, a first area in which data item(s) belonging to a parent level is displayed, and a second area in which data item(s) belonging to a child hierarchical level is displayed, so that the first and second areas are displayed exclusively and without overlapping each other in a display area of every hierarchical level; and

controlling a display of data icons respectively representing the data items in each of the areas.

147. (Previously presented) A computer-readable storage medium storing a program of displaying hierarchically-managed data items, said program comprising the steps of:

setting in a background indicating a parent hierarchical level, a first area in which data item(s) belonging to a parent hierarchical level is displayed, and a second area in which data item(s) belonging to a child hierarchical level is displayed, so that the first and second areas are displayed exclusively and without overlapping each other in a display area of every hierarchical level; and

controlling a display of data icons respectively representing the data items in each of the areas.